The Minnesota Model for Early Childhood Education

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Jennifer's sons were recipients of the Minnesota Model scholarship program through Caring for Kids Initiative, a program providing low-income families access to high quality pre-K child care and education.

"With the early learning scholarships that Caring for Kids Initiative has provided, my sons are college bound and excited for learning ... your giving not only changed our today, you've also changed our tomorrow."

Jennifer was excited to not only have her sons benefit thru the scholarship program, but to benefit herself, as a parent, through participating in the program alongside her children, taking part in parenting training and life skills support opportunities.

"I just wanted to say thank Caring for Kids Initiative for your helpful words, our talks help me get through the days. I'm not sure where I'd be or where I'd be going in life without your help. You helped me get on that path again."

Despite having a highly educated work force, Minnesota has one of the largest education gaps in the country. Based on a comprehensive school readiness assessment, the state estimates that overall 70 percent of children entering kindergarten are school-ready (Minnesota School Readiness Study, 2010). The percentage of poverty children assessed school-ready, however, is as low as 18 percent in some communities (NAZ 2015 Annual Report).

To close this gap, the state has long recognized the need for early intervention in at-risk children and has developed the "Minnesota Model" for Early Childhood Education (ECE). The Minnesota Model consists of home-visiting nurses and mentors, starting as early as prenatal and early

learning scholarships for parents to select from high-quality ECE programs. Initially, the results from the well-known Perry Preschool studies provided the impetus (Barnett, 1996; Parks, 2000). Both the cognitive and social outcomes of Perry Preschool were examined from a cost-benefit perspective and documented a return to society that could be as high as \$16 for every tax dollar invested (Rolnick and Grunewald, 2003; Schweinhart, 2003; Heckman et al., 2010).

Based on these impressive financial benefits, several Minnesota business leaders pledged funding for a demonstration of the model. They selected a low-income community in St. Paul to determine if they could create a high quality ECE intervention and duplicate the Perry Preschool findings.

In this paper, we enumerate the components of the Minnesota Model for ECE and present the findings from the demonstration community in St. Paul. In addition, we report preliminary results from a recent expansion of the model in several other communities around the state. We conclude with a discussion of lessons learned from this initiative.

The Minnesota Model is Developed and Funding is Obtained

While the efforts in Minnesota began with the unexpected cost-benefit results from interventions such as Perry Preschool, the Minnesota Model was also influenced by two additional bodies of research: that relating to neuroscience and brain development (Shonkoff and Phillips 2000; Carrion et al., 2007) as well as findings on the benefits of providing a mentor such as health nurses to assist high-risk families (Olds et al., 1997; Eckerode et al., 2000; Eckerode et al., 2003; Olds, 2002).

In 2006, based on these three lines of research, the Minnesota Model was created. Business leaders from around the state joined together and formed the Minnesota Early Learning Foundation (MELF) and raised \$20 million for an ECE effort. The money was used to create a four-star quality rating system and to implement and evaluate a demonstration project based on parent mentoring and early learning scholarships. The measurable goal was to ensure that children in the program were ready for kindergarten.

The parent mentors were professional home visitors who provided family coaching and information about the characteristics and benefits of high-quality ECE programs

The rating system was called "Parent Aware," and only those programs with a 3- or 4- star rating were eligible for scholarship recipients. Programs were evaluated on a number of well-established criteria. The 3- and 4- star rated programs demonstrated strong support for children's physical health and wellbeing; incorporated a curriculum that that was aligned to state standards; supported strong child-teacher interactions; used an assessment tool to track and support individual child education and development; and were staffed with well-trained teachers. While program evaluation has been initially based on inputs, over time evaluations will incorporate the percent of children assessed school ready.

Implementation

MELF identified a high-risk community in St. Paul for the demonstration project. The population was diverse and most households had incomes below 185% of the Federal Poverty Guidelines.

Living in the St. Paul community and having a household income below 185% of the Federal Poverty Guidelines were the only eligibility requirements for a scholarship. Within 6 months,

and with the help of many community leaders, 449 families were recruited. A recruited parent filled out a short eligibility form. If accepted, the parent received a scholarship letter, identifying the 3- and 4-star rated programs in and around their community. With the help of their parent mentor, they chose ECE programs that worked best for their child and family. The scholarship letter was then sent to the chosen program and, if accepted, forwarded by the program to MELF for payment.

At the same time, MELF was encouraging the ECE programs in the area to get involved with the Parent Aware rating system so they would be eligible for the scholarship recipients. Various programs signed up, including for-profit as well as nonprofit, Head Start and school-based, and family-based and center-based programs.

With recruitment underway, SRI International was hired by MELF to first examine implementation, parent acceptance and program involvement. In time, results on outcomes would follow. RAND Corporation was hired to assess the cost of providing quality ECE.

Methods for Data Collection

SRI obtained data from several sources. Administrative forms provided participant demographic characteristics. Structured telephone interviews and focus groups provided data on satisfaction with the program. Direct child assessments with several standardized tools were employed to determine school readiness. In addition, online surveys were obtained from ECE program directors regarding the costs and uses of scholarship funds.

Results

Both programs and parents became engaged. Once parents learned about the scholarships and available programs, they were eager for their children to begin. They reported the process was easy to use. Parents appreciated being empowered to select the program they felt best for their child. The broad eligibility criteria and minimal ongoing paperwork to maintain their child's eligibility provided consistent and stable care for their child.

At baseline, 221 programs were licensed. Of these, only 10% initially participated in Parent Aware, by 2011 the number of 3- and 4-star rated programs in and near the pilot area increased more than 86%, from 22 programs to 41. The total capacity of high-quality programs increased 116% (from 1,011 slots to 2,182 slots) between 2008 and 2011.

Between 2008 and 2011, 449 children entered the program. Of these, evaluation was conducted on a subsample of 257 children whose families consented to be evaluated, attended the program, and entered kindergarten in 2010 and 2011.

School Readiness Outcomes

Significant improvements were found in vocabulary, language, math skills, social competence, and attention skills. Scores in both language and math reflected grade-level performance. There was also a decrease in the number of scholarship children with problematic scores in four areas. With receptive language, low scores decreased from 56% at baseline to 37% at kindergarten entry (p < .0001). For picture naming, low scores went from 33% to 21% (p < .0001). Print knowledge changed from 30% to 18% (p < .009), and in applied problems, from 22% to 8% (p < .001) (Gaylor et al., 2011).

Cost Data

The cost study conducted by RAND in Year 3 indicated variations in cost per child across different program types. The cost per child ranged from \$7,010 to \$25,603 per year (although the scholarships were capped at \$13,000 per child). Hourly per child costs ranged from \$3.47 to \$19.06 per hour. Family child care programs and for-profit center-based programs had the lowest costs, and nonprofit center-based programs, Head Start, and public school-based programs had the highest. Cost differences were mostly attributable to differences in the number of non-classroom staff employed at each site. Programs such as Head Start, and those at public school centers, and nonprofit programs were more likely to provide a wide range of services such as parent coaches, parent coordinators, or other services, resulting in higher per child costs.

Expansion

In December of 2011, the federal government, impressed with the Minnesota Model findings, awarded Minnesota a "Race to the Top" grant of \$45 million. The grant was to be used to expand Minnesota's early childhood model in four targeted communities: more funding in the St. Paul pilot community, a high-risk area in urban Minneapolis, the While Earth Indian reservation, and a rural area with a sizable at-risk population.

In addition, in the same year, the strong MELF findings led the state of Minnesota to add \$50 million for ECE scholarships. These funds were allocated throughout the state.

Most encouraging, the preliminary results from the 3- and 4-star rated programs were consistent with the original pilot results in St. Paul: Significantly more children were assessed school-ready

and significantly more parents were engaged in their child's education. (For example, see the NAZ 2015 Annual Report.)

Lessons Learned

The ECE research originally captured the attention of the business community as it implied an extraordinary return on investment in quality ECE for at-risk children. MELF, employing the Minnesota Model, demonstrated that this investment was replicable. Making the application process easy for parents, providing parent mentors, and working with community leaders to promote the importance of early learning were key elements in our ability to attract and retain families.

Moreover, implementing the model resulted in several very positive surprises. MELF had not expected as rapid a response by early education providers to expand availability into their programs. Yet, over the first three years the number of programs doubled as did the number of spaces overall. Indeed, shortly after the scholarship program was established, New Horizon Academy, a well-known Minnesota provider, opened a new center in the demonstration neighborhood.

There was also an initial concern that parents would not participate. The scholarships would be viewed as a form of welfare and would brand their child. This did not happen. To the contrary, parents felt honored that their child was awarded a scholarship and virtually every scholarship was used.

Conclusion

Minnesota's state leaders deserve a lot of credit for investing in early education to narrow Minnesota's education gap. It should be clear to all that little progress will be made in closing the achievement gap if we wait until children enter Kindergarten or even if we simply add a 4-year old grade to our schools. Waiting until age four is too late for our most vulnerable children. Low-income children, who are most at-risk of falling into achievement gaps, need multiple years in a high-quality early learning environment in order to catch up and be prepared for kindergarten.

The Minnesota Model has been successfully implemented across the state and significantly increased the school readiness of the children from low-income families. It has been shown that this model is scalable and effective.

It is now time for the state to make the commitment to fully fund the Minnesota Model so that all of the state's vulnerable children will have access to high-quality early childhood education. Based on the economic returns, there is no better public investment.

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